

June 6, 1989

TO: Mine File

FROM: Holland Shepherd, Reclamation Specialist HWS

RE: Hecla's Tailings Pond, Waterfowl Mortalities, M/021/004,
Iron County, Utah

I received a phone call today from Brent Willoughby, Mine Manager of the Escalante Silver Mine. He wanted to relay to me a reply to our May 12, 1989 letter. In that letter, we expressed our dissatisfaction with Hecla's current mitigation techniques, in regard to waterfowl mortalities.

The May 12, 1989 letter asked the operator if the cyanide concentrations in the pond could be lowered. Mr. Willoughby indicated to me that cyanide levels in the pond needed to be kept higher than 100 ppm to allow for further leaching of silver from the tailings. According to Mr. Willoughby, the pond's underdrain system picks up the silver leached from the tailings, hence lowering the cyanide concentration is not an option, as it is part of the processing circuit.

Our May 12th letter also asked if the operator could develop a more effective method of hazing the birds. Mr. Willoughby told me that he had sent off for some information about bird hazing equipment/amplifiers. Apparently, he has run across an advertisement for such equipment in a mining journal. He hopes to have any new hazing equipment set up for the fall migration.

Another mitigative option we discussed is the reduction of the pond surface area. This is something the operator will undertake this fall. Mr. Willoughby indicated that the pond's surface area has been substantially reduced as a result of evaporation. Also, the pond is now being patrolled on weekends. He related that there have been no bird fatalities over the last four weeks, or since our March 3, 1989 visit.

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The May 12th letter discussed the evidence of animal tracks (deer, antelope, or sheep) by the pond's edge. Mr. Willoughby indicated that they had found a breach in the southwest access gate. This has since been repaired. No further evidence of animals has been observed, accessing the pond.

jb
cc: Bruce Bonebreak, Cedar City
Division Wildlife Resources
Dominique Domenici
U.S. Fish & Wildlife Service
Lowell Braxton
Minerals Staff
MN4/126-127